

What is claimed is:

1. An image pickup device provided on a base board, comprising:

an image pickup element provided on the base board and including a photoelectrically converting section in which pixels are arranged, a peripheral surface formed around the photoelectrically converting section and a side surface crossing the peripheral surface;

an optical member including a lens section to form an image of an object onto the photoelectrically converting section of the image pickup element, a leg section to support the lens section and a contact surface to be brought in contact with the image pickup element, wherein the lens section, the leg section and the contact surface are made in a single body; and

wherein the optical member is mounted on the image pickup element such that the contact surface is brought in contact with the peripheral surface or with a surface member when the surface member is provided on the peripheral surface.

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2. The image pickup device of claim 1, wherein a terminal to connect the image pickup element with the base board is formed on the peripheral surface and the contact surface is brought in contact with the peripheral surface between the terminal and the photoelectrically converting section.
3. The image pickup device of claim 1, wherein the photoelectrically converting section is located at a central portion of the image pickup element.
4. The image pickup device of claim 1, wherein an image processing circuit is provided in an inner portion of the image pickup element at an inside of the peripheral surface.
5. The image pickup device of claim 1, further comprising an elastic member to press the lens section in the optical axis direction.
6. The image pickup device of claim 5, further comprising a cover member provided at the object side positioned from the lens section and to press the lens section with the aide of the elastic member, wherein the cover member includes a part capable of transmitting light.

7. The image pickup device of claim 6, wherein the part of the cover member is made of a material having a infrared ray absorbing characteristic.

8. The image pickup device of claim 1, further comprising a first diaphragm to regulate the F-number of the lens section and a second diaphragm located at the object side positioned from the first diaphragm and to regulate a peripheral light flux.

9. The image pickup device of claim 1, wherein the lens section comprises a first diaphragm to regulate the F-number of the lens section and is a positive single lens having a surface with a curvature stronger at an image side.

10. The image pickup device of claim 1, wherein the lens section comprises at least two lenses.

11. The image pickup device of claim 10, wherein the lens section comprises a positive lens and a negative lens.

12. The image pickup device of claim 10, wherein in the lens section, a lens located closest to the image side is a positive lens and a first diaphragm to regulate the F-number is arranged at the object side positioned from the lens located closest to the image side.

13. The image pickup device of claim 10, wherein the position of each of the at least two lenses in a direction perpendicular to the optical axis is set by engaging surfaces of the at least two lenses parallel to the optical axis in the lens section.

14. An image pickup device provided on a base board, comprising:

an image pickup element provided on the base board and including a photoelectrically converting section in which pixels are arranged, a peripheral surface formed around the photoelectrically converting section and a side surface crossing the peripheral surface;

an optical member including a lens section to form an image of an object on the photoelectrically converting section of the image pickup element, a leg section to support the lens section and a contact surface to be brought in

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contact with the image pickup element, wherein the lens section, the leg section and the contact surface are made in a single body; and

a lens frame to retain the optical member;

wherein the position between the lens section and the photoelectrically converting section of the image pickup element in the optical axis direction is determined by bringing the contact surface in contact with the peripheral surface or with a surface member when the surface member is provided on the peripheral surface, and

wherein the position between the lens section and the photoelectrically converting section of the image pickup element in the direction perpendicular to the optical axis is determined by mounting the lens frame on the base board and by retaining the optical member with the lens frame.

15. The image pickup device of claim 14, wherein a terminal to connect the image pickup element with the base board is formed on the peripheral surface and the contact surface is brought in contact with the peripheral surface between the terminal and the photoelectrically converting section.

16. The image pickup device of claim 14, wherein the photoelectrically converting section is located at a central portion of the image pickup element.

17. The image pickup device of claim 14, wherein an image processing circuit is provided in an inner portion of the image pickup element at an inside of the peripheral surface.

18. The image pickup device of claim 14, further comprising an elastic member to press the lens section in the optical axis direction.

19. The image pickup device of claim 18, further comprising

a cover member provided at the object side positioned from the lens section and to press the lens section with the aide of the elastic member, wherein the cover member includes a part capable of transmitting light.

20. The image pickup device of claim 19, wherein the part of the cover member is made of a material having a infrared ray absorbing characteristic.

21. The image pickup device of claim 14, wherein the optical member is adapted to be inserted into the lens frame from the object side.

22. The image pickup device of claim 14, further comprising a first diaphragm to regulate the F-number of the lens section and a second diaphragm located at the object side positioned from the first diaphragm and to regulate a peripheral light flux.

23. The image pickup device of claim 14, wherein the lens section comprises a first diaphragm to regulate the F-number of the lens section and is a positive single lens having a surface with a curvature stronger at an image side.

24. The image pickup device of claim 14, wherein the lens section comprises at least two lenses.

25. The image pickup device of claim 24, wherein the lens section comprises a positive lens and a negative lens.

26. The image pickup device of claim 24, wherein in the lens section, a lens located closest to the image side is a

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positive lens and a first diaphragm to regulate the F-number is arranged at the object side positioned from the lens located closest to the image side.

27. The image pickup device of claim 10, wherein the position of each of the at least two lenses in a direction perpendicular to the optical axis is set by engaging surfaces of the at least two lenses parallel to the optical axis in the lens section.

28. An image pickup device, comprising:

a base board;

an image pickup element provided on the base board and including a photoelectrically converting section;

an optical member including a lens section to form an image of an object on the photoelectrically converting section of the image pickup element and a leg section to support the lens section; and

an elastic member to press the optical member toward the image pickup element with an elastic force.

29. The image pickup device of claim 28, wherein the leg section is brought in contact with a surface of a part of the

image pickup element with a weight of 5 g to 500 g on a condition that the image pickup element is positioned so as to face the lens section.

30. The image pickup device of claim 28, further comprising:

a lens frame fixed to the base board; and

a cover member attached to the lens frame at the object side positioned from the lens section and to press the elastic member, wherein the cover member includes a part capable of transmitting light.

31. The image pickup device of claim 28, wherein the elastic member is constructed as a separate body from the optical member and the cover member.

32. The image pickup device of claim 28, wherein the elastic member is a coil spring.

33. The image pickup device of claim 28, wherein the elastic member is a sheet-shaped member having a opening at a central portion thereof.

34. The image pickup device of claim 33, wherein the sheet-shaped member is made of a material having a light shielding capability and additionally has a function of a diaphragm to regulate the F-number of the lens section.

35 The image pickup device of claim 30, wherein the elastic member is made in a single body with the cover member.

36. The image pickup device of claim 30, wherein the elastic member is made in a single body with the optical member.

37. An image pickup device, comprising:

a base board;

an image pickup element provided on the base board and including a photoelectrically converting section;

an optical member including a lens section to form an image of an object on the photoelectrically converting section of the image pickup element and a leg section to support the lens section; and

a lens frame to support the optical member and having an elastic member to press the optical member toward the image pickup element with an elastic force.

38. The image pickup device of claim 37, wherein the leg section is brought in contact with a surface of a part of the image pickup element with a weight of 5 g to 500 g on a condition that the image pickup element is positioned so as to face the lens section.

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